



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,103	12/15/2000	Sheng-Hsin Hu	16,029	9923

35844 7590 05/14/2003

PAULEY PETERSEN KINNE & ERICKSON  
2800 WEST HIGGINS ROAD  
SUITE 365  
HOFFMAN ESTATES, IL 60195

EXAMINER
----------

THOMPSON, CAMIE S

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 05/14/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/738,103

Applicant(s)

HU ET AL.

Examiner

Camie S Thompson

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27, 29-60 and 80-84 is/are pending in the application.
- 4a) Of the above claim(s) 28 and 61-79 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27, 29-60 and 80-84 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 25, 2003 has been entered.
2. Examiner acknowledges amended claims 1, 27, 47, 55 and 58 and cancelled claim 28.
3. Examiner also acknowledges newly added claims 80-84.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-27, 29-60 and 80-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohama, U.S. Patent No. 5,703,152.

Ohama discloses a deodorizing composition that can capture bad odor substances such as ammonia and amines when sprayed onto a fibrous material such as activated carbon as per instant claims 1-27, 29-60 and 80-84(see abstract and column 1, lines 24-41). The reference

Art Unit: 1774

discloses using a deformable, hydrophobic binding agent such as synthetic rubber, silicon resins and fluoroethylene resins; a masking agent and a blowing agent as per instant claims 1, 8 and 19-23 (see column 4, lines 12-64). The reference discloses using colored inorganic pigment to color the coating material and kaolin or talc to create an opaque coating material as per instant claims 11 and 13 (see column 4, line 55-61). The reference discloses a deodorizing composition that includes aqueous slurry that can be impregnated in a fibrous material, a masking agent, blowing agent that makes the coating material porous and a pigment as per instant claims 27, 37-39 and 41-42, 47, 50 and 55 (see column 4, lines 12-66). Ohama discloses using water insoluble resins that are hydrophobic such as synthetic rubbers, silicon resins and fluoroethylene resins as deformable binding material making the coating material elastomeric as per instant claims 28-30, 35, 49 and 60 (see column 4, lines 46-54). In addition, Ohama discloses using kaolin as an extender to provide opacity and pigments such as titanium dioxide and colored inorganic pigments so as to provide coloring to the coating material as per instant claims 36-38, 48 and 58 (see column 4, lines 55-65).

The coated activated carbon has a relative adsorption efficiency of at least 30% with respect to ammonia, a Shore A hardness value of less than 70, a Hunter Lab L value of at least 40 and an absolute "a" value or absolute "b" value greater than 10, as these are the physical properties of the coated activated carbon material as per instant claims 1-4, 9-10 and 12. Therefore, these features are inherent.

As a mechanical property, the coated activated carbon has a Particulate Noise Level of about 52 or less and is at least 6 decibels lower than the uncoated activated carbon as per instant claims 14-18. Therefore, these features are inherent.

Art Unit: 1774

In the reference, Ohama discloses using metal oxides as per instant claim 26 (see column 3, lines 24-31).

The reference discloses that the metal oxide is 5-80% by weight of the total composition making it more concentrated than the coating material as per instant claims 24-25 (see column 3, lines 31-45). It is also noted that Ohama discloses that the coating composition was applied to a surface of round filter that contained activated carbon having a diameter of 2 mm as per instant claims 56-57 (see column 9, lines 8-10)

Claims 1, 22-26 and 80 are product-by-process claims. Even though the product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. The coated activated carbon is not a different product from the prior art because of the process. See MPEP 2113.

6. Claims 1-27, 29-60 and 80-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Mauro et al., U.S. Patent Number 5,480,636.

Mauro teaches the use of an odor controlling composition impregnated onto activated carbon to remove malodorous gases such as dimethylsulfide that may be found on sanitary napkins or a paper diaper (see abstract and column 1, lines 16-39). Claims 1, 22-26 and 80 are product-by-process claims. Even though the product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process

Art Unit: 1774

claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. The coated activated carbon is not a different product from the prior art because of the process. See MPEP 2113.

### ***Response to Arguments***

7. Applicant's arguments filed February 25, 2003 have been fully considered but they are not persuasive. The rejection of Ohama in view of Pyzel is withdrawn due to applicant's argument. Applicant states in his remarks on page 5 that the coating material includes a masking agent, which can be opaque in order to mask the dark color of the activated carbon. An opaque masking agent may not necessarily mask the dark color the activated carbon. Applicant argues that the Ohama reference does not include any other materials or a water-insoluble binding agent. Ohama teaches binders and other fillers, extenders and blowing agents in columns 3-5. The Ohama reference teaches in column 4, lines 45-54 that water-insoluble resins such as vinyl acetate are included in the paint composition. Applicant argues that the Ohama reference teaches mixing and kneading the composition with activated carbon. Ohama teaches that the composition can be impregnated onto the fibrous article. Additionally, the manner in which the composition is put onto the activated carbon does not make the composition different. Process limitations in product claims are not given any patentable weight. Applicant argues that Ohama does not disclose binding a colored masking agent to the surface of the activated carbon. If Ohama teaches a pigment and extenders, this includes masking materials. The reference teaches talc, titanium dioxide, black iron oxide as well as paint. All of these have masking capabilities. Applicant further argues that Ohama reference does not disclose the activated carbon in

Art Unit: 1774

combination with the paint, ink or resin component. The examiner does not agree because in column 4, the reference specifically states that the activated carbon aqueous slurry can be formed into a shape, which can be combined with a resinous or paint composition. Therefore, the activated carbon is in contact with the other materials. Further the claim is drawn to an activated carbon with a coating that includes a masking agent and a binding agent. The activated carbon of Ohama is in a paint composition (coating), which has a binding agent and a masking agent.

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

A handwritten signature in black ink, appearing to read 'Cynthia H. Kelly', is written over the typed name and title.